PATENT COOPERATION TREATY PCT

INTERNATIONALSEARCHREPORT

(PCT Article 18 and Rules 43 and 44)

International application No. PCT/JP2005/012272 28.06.2005 (Earliest) Priority Date (day/month/year) 28.06.2005 30.06.2004 Applicant RICOH COMPANY, LTD. This international search report has been prepared by this International Scarching Authority and is transmitted to the applicant to Article 18. A copy is being transmitted to the International Bureau. This international search report consists of a total of 3 sheets. It is also accompanied by a copy of each prior art document cited in this report. 1. Basis of the report a. With regard to the language, the international search was carried out on the basis of the international application in language in which it was filed, unless otherwise indicated under this item. In the international search was carried out on the basis of the international application furnished this Authority (Rule 23.1(b)). b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. Certain claims were found unsearchable (See Box II). 4. With regard to the title, the text is approved as submitted by the applicant. the text has been established by this Authority to read as follows:	pplicant's or agent's file reference	FOR FURTHER ACTION a	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
This international search report has been prepared by this International Searching Authority and is transmitted to the applicant accord to Article 18. A copy is being transmitted to the International Bureau. This international search report consists of a total of3 sheets. It is also accompanied by a copy of each prior art document cited in this report. 1. Basis of the report a. With regard to the language, the international search was carried out on the basis of the international application in language in which it was filed, unless otherwise indicated under this item. the international search was carried out on the basis of a translation of the international application furnished this Authority (Rule 23.1(b)). b With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. 2 Certain claims were found unsearchable (See Box III). 3 Unity of invention is lacking (See Box III). 4. With regard to the title, the text is approved as submitted by the applicant.	••	-	
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		mitted by the applicant.	
			s:
5. With regard to the abstract,	5 With repard to the abstract.		
the text is approved as submitted by the applicant.	_	itted by the applicant.	
the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The appli may, within one month from the date of mailing of this international search report, submit comments to this Authority			
6. With regard to the drawings,	6. With regard to the drawings,		
a. the figure of the drawings to be published with the abstract is Figure No1	a. the figure of the drawings to be	ublished with the abstract is Figure 1	No1
as suggested by the applicant. as selected by this Authority, because the applicant failed to suggest a figure. as selected by this Authority, because this figure better characterizes the invention. b. none of the figures is to be published with the abstract.	as selected by this Au as selected by this Au	hority, because the applicant failed to su hority, because this figure better charact	

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International application No. PCT/JP2005/012272

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl.7 H04L5/16, 7/04, 29/08

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl. H04L5/16, 7/04, 29/08

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Published examined utility model applications of Japan 1922-1996
Published unexamined utility model applications of Japan 1971-2005

Published unexamined utility model applications of Japan 1971-2005 Registered utility model specifications of Japan 1996-2005 Published registered utility model applications of Japan 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Category*	Citation of document, with indication, where app	propriate, of the relevant passages	Relevant to claim No.
A	JP 59-163935 A (Sony Corporation) 1984.09.17, figure 4 (Family: none)		1-23
Α	JP 63-257860 A (NEC Corporation) 1988.10.25, figure 1 & EP 287119 A & <u>US 4964141</u> A & EP 287119 B1 & DE 3852143 G		1-23
A	JP 54-13708 A (Nippon Telegraph and Telephone Corporation) 1979.02.01, figures 4 (a), (b) (Family: none)		1-23
Α	JP 59-135949 A (Pioneer Corporation) 1984.08.04, claim & DE 3344071 A & DE 3344071 C & US 4623992 A		1-23
	& <u>.US 462399</u> 2 A		
* Specia "A" docum	er documents are listed in the continuation of Box C. I categories of cited documents: ent defining the general state of the art which is not	See patent family annex. "T" later document published after the priority date and not in conflict with	international filing date on the application but cited to
* Specia "A" docum consid "E" earlier nations "L" docum is cite specia "O" docum means "P" docum	er documents are listed in the continuation of Box C. I categories of cited documents: ent defining the general state of the art which is not ered to be of particular relevance application or patent but published on or after the interal filing date ent which may throw doubts on priority claim(s) or which it o establish the publication date of another citation or other i reason (as specified) ent referring to an oral disclosure, use, exhibition or other	"T" later document published after the priority date and not in conflict wit understand the principle or theory und "X" document of particular relevance; the considered novel or cannot be inventive step when the document is "Y" document of particular relevance; the considered to involve an inventive combined with one or more of combined with one or more of the particular being a business as a particular plant.	lerlying the invention he claimed invention canno e considered to involve as s taken alone he claimed invention canno we step when the document in her such documents, such son skilled in the art
* Specia "A" docum consid "E" earlier nations "L" docum is citec specia "O" docum means "P" docum than th	er documents are listed in the continuation of Box C. I categories of cited documents: ent defining the general state of the art which is not ered to be of particular relevance application or patent but published on or after the interal filling date tent which may throw doubts on priority claim(s) or which to establish the publication date of another citation or other reason (as specified) tent referring to an oral disclosure, use, exhibition or other tent published prior to the international filing date but later	"T" later document published after the priority date and not in conflict wit understand the principle or theory und document of particular relevance; t be considered novel or cannot be inventive step when the document is document of particular relevance; t be considered to involve an inventive combined with one or more of combination being obvious to a personal priority date.	herlying the invention he claimed invention canno e considered to involve as taken alone he claimed invention canno we step when the document i her such documents, such son skilled in the art t family
* Specia "A" docum consid "E" earlier nations "L" docum is cite special "O" docum means "P" docum than th	er documents are listed in the continuation of Box C. I categories of cited documents: ent defining the general state of the art which is not ered to be of particular relevance application or patent but published on or after the interal filing date tent which may throw doubts on priority claim(s) or which to establish the publication date of another citation or other reason (as specified) tent referring to an oral disclosure, use, exhibition or other tent published prior to the international filing date but later te priority date claimed actual completion of the international search	"T" later document published after the priority date and not in conflict wit understand the principle or theory und document of particular relevance; the considered novel or cannot be inventive step when the document if the considered to involve an inventive combined with one or more of combination being obvious to a persuance of mailing of the international search."	herlying the invention he claimed invention canno e considered to involve as taken alone he claimed invention canno we step when the document i her such documents, such son skilled in the art t family

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т	Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT egory* Citation of document, with indication, where appropriate, of the relevant passages			
Category*	Chanon of document, with indication, whole appropriate, or the forestant pussages	Relevant to claim No.		
A ·	JP 2002-101076 A (CANON INC) 2002.04.05, figure 1 (Family: none)	1-23		
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